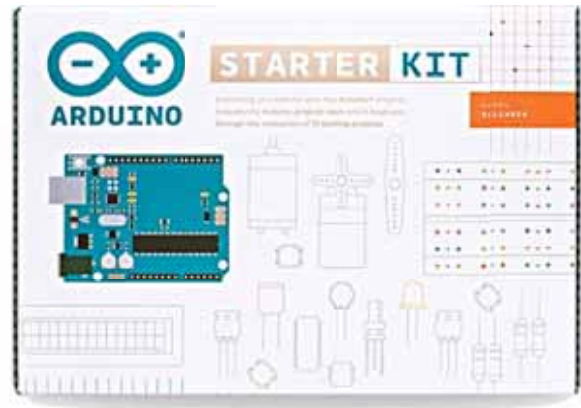# Arduino Starter Kit

Overview

This kit walks you through the basics of programming and electronics in a hands-on way. You will be able to build 15 projects using components that let you control the physical world through different kinds of sensors and actuators. Once you have mastered this knowledge, you will have a palette of code and circuits to create something interesting and useful. So build, hack and share!.
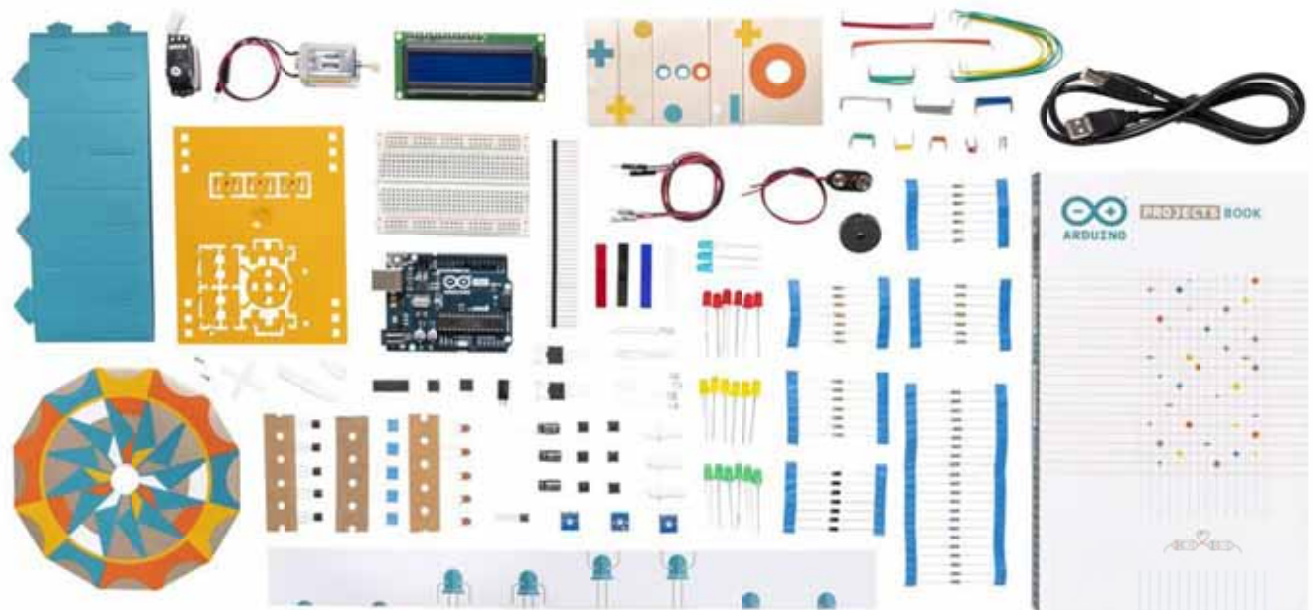
Contents:

1	Arduino Projects Book (176 pages)
1	Arduino Uno Rev3
1	Breadboard 400 points
70	Solid core jumper wires
1	Easy-to-assemble wooden base
1	9v battery snap
1	Stranded jumper wires (black)
1	Stranded jumper wires (red)
6	Photoresistor [VT90N2 LDR]
3	Potentiometer 10 kilohm
10	Pushbuttons
1	Temperature sensor [TMP36]
1	Tilt sensor
1	Alphanumeric LCD (16x2 characters)
1	LED (bright white)
1	LED (RGB)
8	LEDs (red)
8	LEDs (green)
8	LEDs (yellow)
3	LEDs (blue)
1	Small DC motor 6/9V
1	Small servo motor
1	Piezo capsule [PKM17EPP-4001-B0]
1	H-bridge motor driver [L293D]
1	Optocouplers [4N35]
2	Mosfet transistors [IRF520]
5	Capacitors 100uF
5	Diodes [1N4007]
3	Transparent gels (red, green, blue)
1	Male pins strip (40x1)
20	Resistors 220 ohm
5	Resistors 560 ohm
5	Resistors 1 kilohm
5	Resistors 4.7 kilohm
20	Resistors 10 kilohm
5	Resistors 1 megohm
5	Resistors 10 megohm

The Arduino UNO R3 is a microcontroller board based on the ATmega328. It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analog inputs, a 16 MHz crystal oscillator, a USB connection, a power jack, an ICSP header, and a reset button. It contains everything needed to support the microcontroller; simply connect it to a computer with a USB cable or power it with a AC-to-DC adapter or battery to get started. The UNO differs from all preceding boards because it does not use the FTDI USB-to-serial driver chip.